W5YI

National Volunteer Examiner Coordinator

REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable. May be reproduced providing credit is given to The W5YI Report.

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SURPRISES IN FCC FUNDING BILL!

Club Licensing, Scanner Ban "Sneaked in", Amateur User Fees Dropped

The FCC funding legislation adopted by the House Commerce Committee on July 29 contains two unusual items of interest to amateurs and other radio hobbyists: licensing of Amateur Radio clubs and a ban on scanner frequency coverage.

As far as we can determine, the provisions -introduced by Rep. Matthew J. Rinaldo (R-NJ) -were the subject of no public discussion or hearing. "These were probably done in closed-door
meetings that would not be available to the public," a congressional staff member explained.

The legislation also drops the Amateur Radio Service from the list of radio services that would be charged "user fees". The General Mobile Radio Service remains on the fee list at \$10 per year. That would shoot the cost of a GMRS license to \$85 total. If the fees are adopted the FCC could stand to gain \$65 million, about half of its 1992 budget, but the Senate has not yet proposed user fees and the concept remains controversial.

The lack of fees for the Amateur Service means that future improvements in FCC processing of ham licenses, assigning of additional personnel, increased speed of processing etc. may become more difficult. Other radio services that "pay their own freight" may be more likely to receive the needed resources, sources told us.

An alternative is for the ARRL to offer some of the licensing services. The bill would give the ARRL the exclusive authority to provide the FCC with a callsign service by amending Section 4(f)(4) of the Communications Act as follows:

"The Commission for purposes of providing specialized, radio club, and military-recreation call signs, may utilize the voluntary and uncompensated services of an incorporated association of amateur radio operators with more than 100,000 dues-paying members representing all States which has a tax-exempt status under section 501(c)(3) of the Internal Revenue Code."

This provision does not mention the ARRL by name. The wording is carefully constructed, however, to foreclose other Amateur Radio organizations from participating in the special licensing assistance program unless they have 100,000 dues-paying members and so forth.

Club licensing problematic

The Commission has not issued club callsigns since 1978, and the FCC does not now have the authority to accept outside help in amateur radio operator licensing other than Volunteer Examining. This is really a testing, and not a licensing or call sign assignment program.

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Advanced,

licensed

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The FCC will renew existing club licenses, but the procedure is much more expensive for the FCC than the processing of standard individual licenses. Many clubs change trustees every year, and they must file a new Form 610 with the FCC. Clubs often forget to renew their licenses, and the grace period expires. When they later ask the FCC to renew the license, and the FCC declines, many clubs ask their elected representatives to put pressure on the FCC.

That Congressional input requires rapid FCC response, which requires more expenditure of time and money to explain the FCC's callsign assignment policies. The Commisison also gets dragged into disputes when clubs sometimes split into factions, with each faction claiming to deserve the coveted club license.

Don't touch that dial

The Rinaldo amendment would also prohibit the 824--849 and 869-894 MHz bands from scanners, as long requested by the cellular radio industry. Here is the wording:

SEC. 8...(d)(1) INTERCEPTION OF CELLULAR TELE-COMMUNICATIONS -- Within 180 days after the date of enactment of the Federal Communications Commission Authorization Act of 1991, the Commission shall prescribe and make effective regulations denying equipment authorization...for any scanning receiver that is capable of:

- (A) ...receiving transmissions in the frequencies allocated to the domestic cellular radio telecommunica-
- (B) ...readily being altered by the user to receive transmissions in such frequencies, or:
- (C) ... being equipped with decoders that convert digital cellular transmissions to analog voice audio.

"(2) MANUFACTURE OF NONCOMPLYING EQUIP-MENT.--Beginning one year after the effective date of the regulations adopted..., no receiver having the capabilities described in subparagraph (A), (B), or (C) of paragraph (1) shall be manufactured that does not comply with the requirements set forth in paragraph (1)."

[The "equipment authorization" referred to above is FCC Part 15 certification which is required for many consumer electronics products.]

Most observers inside and outside of government we spoke with found the scanner amendment to be as objectionable as previous attempts by the Electronic Communications Privacy Act (ECPA) to restrict receivers. "If their strategy works - and unless scanner own-

ers act quickly, it looks like it will - the tuning capabilities of radio receivers will shrink as other services try the same legislative tactic," Washington radio consultant Robert Horvitz said.

Sources were also concerned about how the FCC would distinguish "scanning receivers" from "service monitors" or "test equipment," and how it would determine what is meant by "readily altered."

"No complaints so far"

The legislation appears to place the onus for privacy on the public instead of on the originators of the emission where it belongs. If it is passed into law, cellular vendors could claim bogus protection instead of using technical measures to protect their subscribers' communications. The legislation could require police and the courts to ascertain when a radio was manufactured in order to rule on whether it may be legally owned. No one knows if the FCC would interpret the bill's language to forbid tunable receivers that do not incorporate any scanning function.

The law could also make it difficult to obtain a scanner for use in designing and testing low-power transmitters that are permitted in the 824-849/869-894 MHz bands under recently revised Rule 15.209. Such units may emit a field strength of up to 200 uV/m at 3 meters.

Those Congressional staff members we were able to reach (during this recess period) were pleased that they had received "no complaints so far" on the legislation.

We asked Association of North American Radio Clubs attorney Frank Terranella to review the issues. He wrote for us the following guest editorial.

From the People Who Brought You the ECPA ... by FRANK TERRANELLA, N2IGO - ANARC Legal Counsel -- Author, The Listener's Lawbook

They're at it again in Washington. There's a bill on its way through the House of Representatives that aims to require radio manufacturers to omit certain frequencies from their coverage.

Apparently the cellular people aren't happy with the "privacy" the Electronic Communications Privacy Act (ECPA) was supposed to provide. Now they want to make general coverage UHF radios contraband. The bill would make it illegal to sell a radio that has even the capability of being altered to pick up the prohibited frequencies. This is apparently an attempt to stop the "snip a diode and get full coverage" trade. But what it really is is an unworkable piece of legislation, every bit as ill-conceived and unenforceable as its

bpel....! andsh tohtee, ...htee, ...ham.....! I he... had ... station or operator license revoked or suspended., I do not own a sig. currently prease serial a copy of VOI IINTEER EXAMINER? Extra Class license the following YOU LIKE TO RECOME

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parent--the ECPA.

How will the radio police know a legal radio from an illegal one? In New Jersey, the police can't tell the difference between a 2-meter HT and a scanner. Does anyone in Washington really believe that police will be able to tell legal scanners from illegal ones? The answer, of course, is no. And it doesn't matter. As long as the law is on the books, the cellular people can advertise complete privacy. They know the law will not bring real privacy, and they don't care. All they want to do is sell telephones. I'm sure that the readers of W5YI Report don't need to be told that the laws of Congress don't overrule the laws of physics, but the general public does.

Most people outside the radio community consider this a privacy issue. "What right do you have to listen in on my conversation?" people ask. "I am paying good money to use that telephone and I am paying for privacy," they say.

Now I'm all for privacy. I believe it's a constitutional right. I agree with the ACLU (of which I am a member) that the protection of privacy rights is one of the great legal battles of the nineties. However, when I went to law school (not all that long ago) I was taught that there is no right of privacy unless there is a "reasonable expectation" giving rise to it. Thus, if you have a private conversation using a bullhorn, even though you talk about the most private and intimate details of your life, there is no reasonable expectation of privacy and you have no right to stop others from listening.

Cellular telephone is exactly the same as talking with a bullhorn, except the frequency is higher and the bullhorn is more powerful. Anyone who uses such a device to communicate cannot reasonably expect that the conversation will be private. The courts were quite content to draw the privacy lines this way until the ECPA came along.

With the ECPA, Congress declared it to be reasonable to expect that unscrambled conversations broadcast over the public airwaves are private. Of course, everyone knows that this is absurd, but Congress has the power to turn black into white, and the unreasonable into the reasonable.

Now, these great minds are preparing to require radio manufacturers to deny Americans access to certain frequency bands on all radios. We'll start with the cellular band, they say. After all, listening there is illegal anyway. The truth is that "intentional interception" of telephone calls is illegal, not casual scanning through the cellular bands. But after they take the cellular bands out of your radio, what will be next? Probably the police.

In many states it's already illegal to listen to a scanner in your car. It's just one short step from that

to cutting those bands off the VHF-UHF dial. Then, maybe the airline frequencies, the business frequencies, the fire departments will be snipped off your radio. Just like the Marx Brothers contract in "A Night at the Opera" -- a little snip here, a little snip there, and soon there will be nothing left but the broadcast bands.

Never in the history of this nation has the Government restricted access to the "public airwaves" by making radios contraband. It seems we've begun the slide down the slippery slope known as the ECPA. The only way to put on the brakes is to write your representative in Congress.

(The official name of the bill is H.R. 1674, The Federal Communications Commission Authorization Act of 1991.)

NEW NOVICE CW SUBBAND PROVES WORTHWHILE

We reported on the relocation of the 80 meter Novice CW band from 3700-3750 kHz down to 3675-3725 kHz in our Jan. 15, 1991 issue. The subband was primarily changed to reduce the amount of mutual interference between U.S. and Canadian amateur stations.

FCC personnel recently explained a few details of their monitoring project in support of the rule-making. The main issue was that Canadians liked to operate phone in 3725-3750 and this caused QRM between the VE prefix ops and U.S. Novices operating CW in their band 3700-3750. The QRM was especially bad at night. So the FCC shifted the Novice band down 25 kHz in PR Docket 90-100.

The FCC monitoring network studied use of the band before, during and after the rules change. Monitoring confirmed that there was a lot of interference between SSB and CW in the 3725-3750 segment. This was not the case in 3700-3725.

After the rule change most of the interference was eliminated, and interference was not observed in the new 3675-3700 kHz portion. The segment 3700-3725 kHz appeared unchanged. The FCC was also concerned about whether the word got out to Novices about the allocation change, and the results were quite good. In fact one FCC staff member remarked that Novices are often better in compliance than other amateur license classes. Monitors noted that one month after the rules became effective, virtually no Novice stations continued to use the reallocated frequency segment.

Thus the rule change was found effective in preventing interference between CW and SSB emissions and the reallocation occurred in orderly fashion.

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AMATEUR RADIO RECIPROCITY WITH MEXICO

We mentioned in our last issue that the FCC had released a news bulletin stating that a formal reciprocal Amateur Radio operating arrangements with Mexico were imminent. The release said the Commission would issue another public notice describing all procedures

During the past two weeks we have made many phone calls trying to get further information. The initial press release came from Herb Zeiler, Deputy Chief in the Private Radio Bureau's Special Services Division. Herb told us the announcement was a result of an international meeting held last month in Chestertown, Maryland. He referred me to Rudy Baca in the FCC's Office of International Communications.

Rudy said the Chestertown, MD conference "...was the second meeting of the U.S./Mexico Consultative Group on Communications. The initial meeting was held last year outside of Mexico City. The purpose of this group is to raise the level of telecommunications awareness in both countries and the level at which it is addressed.

Representatives from the SCT, NTIA and the State Department met with their counterparts from Mexico which is generally the SCT, an acronym for the Secretary of Telecommunications in Mexico." [The National Telecommunications and Information Administration is the advisor to the White House on telecommunications matters. NTIA also manages government radio spectrum.]

"The purpose of the meeting was to review progress [since] last year. There were certain working groups that were set up on specfic aspects ... basically broadcasting, mobile radio ...and that type of thing. We reveiwed the progress made in the working groups and set an agenda for the coming year. We will focus on agreements in ceratin areas ...particularly broadcasting because agreements were not reached during the prior year.

"As part of the meeting, certain agreements were signed. One of the agreements was a reciprocal use of certain frequencies for presidential protection. That was an agreement between the treasury department, signed by the State Department, and the SCT so that when high government officials from either country are travelling in border areas they use certain protected frequencies for their telecommunications. Another one was an agreement for coordination of satellite earth stations in both countries.

"Amateur radio became involved at this meeting because the Private Radio Bureau's Ralph Haller [N4RH] suggested that this would be an appropriate topic for the consultative group to address in their

working group sessions. He, in fact, attended both the first meeting in Mexico and second meeting in Chestertown, Maryland. A consensus was reached to go forward with an agreement on the use of ham radio in both countries in accord with the [1987] Lima [Peru] Convention.

"Our goal is to have the final reciprocal Amateur operating arrangement in line with the arrangement we have with Canada. We are trying to minimize the paperwork burden. Mexico lacks the bureaucratic structure of Canada. Even though Mexico is quite supportive [of a formal reciprocal amateur operating arrangement], they need to have an initial idea of what

this is going to entail.

The agreement may also have some trade implications although it is not directly involved in the North American Free Trade discussions. They are looking at all the various aspects of communications [and] ...trying to proceed as carefully as possible. We are trying to work out procedures and minimum notice forms so that the operations can continue with a minimum of bureaucratic interference.

"The goal is complete reciprosity with Mexico, ...the operating parameters are still being worked out. We expect to have a fairly detailed press release shortly. It is a matter of clearing everything with Mexico." Baca said he would get a copy to me just as soon as it was available. He said he was waiting for word from the State Department and mentioned a "Bill Jahn" as the contact who would be sending him the information.

We had heard that there was a document in Spanish which related to Amateur reciprocity with Mexico. We asked Rudy about that... "No documents have been cleared through the State Department yet. In fact, that is part of the problem in dealing with a foreign country. Everyone has to clear on both translations. I do expect, however, that these things will have cleared by your next issue. We had hoped to have them by now. We do not know the amateur frequencies involved or any procedures. We are exchanging information..."

Bill Jahn's office at the State Dept. said they were awaiting further information from Mexico City. A document has been promised from their Anne Jillson, the Transportation and Communications Officer at the

American Embassy in Mexico.

I called Anne and she said that a "Mr. Brown" (a strange name for Mexico, I thought) had yet to send her the needed information outlining the amateur radio reciprocal operating procedures. She said she would follow up the document and FAX me a copy (it would be in Spanish) as soon as it was received from the SCT.

1988

June

New

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JUNE AMATEUR LICENSING STATISTICS

1989

1990

1991

11011					
Amateurs:	1494	2003	1984	3231	
Upgrading:					
Novices	1300	1361	1690	1002	
Technicians	400	395	514	420	
Generals	312	279	345		
Advanced	247	200	266	191	
Total:	2259	2235	2815	1888	
Renewals: (*)					
Total Renew:	2366	* 241	* 77	* 45	
Novices	203	38	* 8	* 1	
Purged:					
Total Dropped:	1298	*1729	* 4068	* 11	
Novices	669	839	* 1813	* 2	
Census:					
Indiv. Oper. 4	36403	459307	451878	520919	
Change/Year -	+6912 +	22904*	-7429*	+69041*	
Individual Ope	rators by	Class: (and % of	total)	
Extra Advan.					
June 1988				-	
45399 98343	113342	97518	81801	436403	
10.4% 22.5%	26.0%	22.4%	18.7%	100.0%	
June 1989 (*)					
48711 100808	115686	109296	84806	459307	
10.6% 21.9%	25.2%	23.8%	18.5%	100.0%	
June 1990 (*)					
48624 98615	113329	110790	80620	451878	
10.8% 21.8%		24.5%	17.8%	100.0%	
June 1991 (*)					
55425 106462	121204	140858	96970	520919	
10.7% 20.4%				100.0%	
Club/			, 5, 5, 5		
RACES &	(1988)	(1989)	(1990)	(1991)	
Military:	2353	2474	2449		
Total Active: 4	38756	461781	454327	523351	
	+1.6%	+5.3%*	-(1 6%)*	+15.2%*	
	number o	f amataur	s in 1990	and 1991	
(*) NOTE: The number of amateurs in 1990 and 1991 is not comparable with prior years. Due to the imple-					
mentation of the 10-year term license in 1984, ama-					
teurs who would ordinarily be dropping out of the					
Leuis Will Woul	u oruman	iy be die	pping out	Or till	

[Source: FCC Licensing Facility, Gettysburg, PA]

Amateur Service between 1989 and 1993 by not re-

five years before being purged from the FCC's data

base. This has the effect of overstating the amateur

census for 1989 through 1991 since the records of

is in excess of half a million!

silent keys and non-renewals will not be deleted. The

number of active amateur radio operator records now

newing will be carried on the amateur roles for another

AMATEUR RADIO CALL SIGNS

... issued as of the first of August 1991:

Radio	Gp."A"	Gp."B"	Gp."C"	Gp."D"
District	Extra	Advan.	Tech/Gen	Novice
Ø (*)	AAØFN	KFØTD	NØOVO	KBØJKO
1	WU1Q	KD1CQ	N1JVE	KA1ZEZ
2 (*)	AA2FU	KF2DI	N2NKZ	KB2NMB
3	WQ3L	KD3YB	N3KCW	KA3ZIH
4 (*)	AC4HS	KO4FW	(***)	KD4DIH
5 (*)	AA5ZV	KI5SE	N5VDK	KB5QES
6 (*)	AB6EB	KM6FT	(***)	KC6ZCM
7 (*)	AA7JI	KG7SE	N7TDQ	KB7NZW
8 (*)	AA8EK	KF80U	N8PPO	KB8MXT
9	AA9BJ	KF9EV	N9MDS	KB9HDO
N.Mariana Is.	AHØK	AHØAH	KHØAN	WHØAAQ
Guam	KH2S	AH2CM	KH2FJ	WH2AMU
Johnston Is.	AH3D	AH3AD	KH3AG	WH3AAG
Midway Is.		AH4AA	KH4AG	WH4AAH
Hawaii	(**)	AH6LH	WH6AZ	WH6CNV
Kure Is.			KH7AA	
Amer. Samoa	AH8D	AH8AE	KH8AI	WH8ABA
Wake W.Peale	AH9A	AH9AD	KH9AE	WH9AAH
Alaska	(**)	AL7NI	NL7YL	WL7CCQ
Virgin Is.	NP2Q	KP2BZ	NP2EK	WP2AHK
Puerto Rico	(**)	KP4SF	(***)	WP4KJF

CALL SIGN WATCH: *=All 2-by-1 "W" prefixed call signs have been assigned in every radio district except the 3rd call sign area. Two-by-two format call signs from the AA-AK block are assigned to Extra Class amateurs when 2-by-1's run out.

**=All Group A (2-by-1) format call signs have been assigned in Hawaii, Alaska and Puerto Rico. Group "B" (2-by-2) format call signs are assigned to Extra Class when Group "A" are depleted.

***=Group "C" (primarily 1-by-3) call signs have now run out in the 4th, 6th and Puerto Rico call districts. According to the rules (adopted by the Commission February 8, 1978, Docket No. 21135), Technician/General class amateurs are next assigned Group "D" (2-by-3 format) call signs when all Group "C" have been assigned. Upgrading Novices holding a 2-by-3 format call sign in the 4th, 6th and Puerto Rico call areas will no longer be able to request a Group "C" call and will be automatically assigned another more recent 2-by-3 format call sign if they do! Contrary to the wishes of many amateurs, the FCC has said they will not be going back and reassigning unused "K" and "W" 1-by-3 format call signs.

[Source: FCC, Gettysburg, Pennsylvania]

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CALL SIGN ASSIGNMENT SEQUENCES

We have covered this before, but we still get a lot of questions - especially from new amateurs regarding the *Amateur Station Call Sign Assignment System*. Briefly, here is the procedure that the FCC follows in issuing ham call signs:

[1.] There are 13 call sign areas; Region Ø to 9, plus 11 (Alaska), 12 - Atlantic (Caribbean) and 13 - Pacific (Hawaii and pacific island possessions) - and 4 call sign prefix groups; "A" Extra Class, "B" Advanced; "C" General/Technician and "D" Novice.

[2.] A new call sign is sequentially selected by the FCC's computer from the alphabetized regional-group list for the licensee's operator class and mailing address. When the call signs in any regional group list are exhausted, the selection is made from the next lower group.

[3.] No requests for a specific call sign are granted and a call signs are only changed when requested by a licensee. New call signs are issued after two years beyond expiration.

Group "A" - Amateur Extra Class (Approx. 90,000 avail.)

Note: #=Region number; ¢=Sequential suffix letters

Region & Call Sign Assignment Sequences

Φ-9 AA#¢-AK#¢; KA#¢-KZ#¢; NA#¢-NZ#¢;

WA#¢-WZ#¢; AA#¢¢-AK#¢¢ (Group B)

11 AL7¢; KL7¢; NL7¢; WL7¢ (Group B)

12 KP#¢; NP#¢; WP#¢ (Group B)

13 AH#¢; KH#¢; NH#¢; WH#¢ (Group B)

Group "B" - Advanced Class (Approx: 350,000)
Region & Call Sign Assignment Sequences

Ø-9 KAØ¢¢; KA1¢¢; KB#¢¢-KZ#¢¢; NA#¢¢-NZ#¢¢
WA#¢¢-WZ#¢¢ (Group C)

11 AL7¢¢ (Group C)

12 KP#¢¢ (Group C)

13 AH#¢¢ (Group C)

Group "C" - General/Technician Class (Approx. 175,000)
Region & Call Sign Assignment Sequences

0-9 N#¢¢¢ (Group D)

11 KL7¢¢; NL7¢¢; WL7¢¢ (Group D)

12 NP#¢¢; WP#¢¢ (Group D)

13 KH#¢¢; NH#¢¢; WH#¢¢ (Group D)

Group "D" - Novice Class (Approx. 4,500,000)
Region & Call Sign Assignment Sequences

Ø-9 KA1¢¢¢; KB2¢¢¢-KZ#¢¢¢; WA#¢¢¢-WZ#¢¢¢

11 KL7¢¢¢; WL7¢¢¢ 12 KP#¢¢¢; WP#¢¢¢ 13 KH#¢¢¢; WH#¢¢¢

INITIAL AMATEUR LICENSES BY CLASS/YEAR

One of the assumptions of the "no code" proceeding (PR Docket 90-55) was that most newcomers to the Amateur Service, given a choice, would elect to enter via a "codeless" rather than the Novice license. Therefore the Commission initially believed that there would be no need for a Novice Class license. The Communicator license was to replace the Technician Class.

As you are all aware, the FCC finally elected to retain both the Novice and Technician Classes. They simply eliminated the code requirement from the Tech. It is now interesting to take a look at the breakdown of the initial class of license held by beginners in the Amateur Service.

Keep in mind that the first Codeless Technician operator license was issued on March 12, 1991. Prior to this date 95% of all new hams entered the hobby at the Novice level. Now, more than 60% of all newcomers enter at the Technician level. Many Amateurs, however ...especially youngsters, still prefer Novice entry! Here are the FCC figures showing class of first licence issued over the last four years:

Class Newcomers to the Amateur Radio Service						
1988 Jan	Feb	Mar	Apr	May	Jun	Total
Nov 989	1466	2407	1996	2714	1234	10806
Tech 165	126	251	168	233	186	1129
Other 35	_32	_75	_31	_55	_74	302
Total 1189	1624	2733	2195	3002	1494	12237
1989 Jan						
Nov 1930						
Tech 247						
Other 57						
Total 2234	1274	2147	2821	3302	2003	13871
1990 Jan	Feb	Mar	Apr	May	Jun	Total
Nov 2434	1679	2466	2368	3875	1724	14546
Tech 191						
Other 46	_43	_56	_51	_50	_46	292
Total 2671	1941	2727	2658	4284	1984	16265
1991 Jan						
Nov 1713						
Tech 89						
Other 14						
Total 1816	2162	2656	5749	4714	3231	20328

Note the 53.4% increase in initial operator licenses issued during the period April to June, 1991 - the first three full months of issuing Codeless Tech tickets.

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NEW HAM RADIO VIDEO COMING!
Video Teaching Tool Explores Amateur Radio in Space

We recently had the pleasure of meeting with video producers *Roy Neal/K6DUE* and *Bill Pasternak-/WA6ITF* in Washington. The two are hard at work on the latest ARRL/AMSAT video titled Ham Radio in Space. Roy Neal is best known as the veteran NBC Science Editor who played a major role in obtaining NASA approval for the *Shuttle Amateur Radio Experiment* (SAREX) program. Bill Pasternak is producer of the *Amateur Radio Newsline* bulletin service and is a network television engineer in Los Angeles.

Ham Radio in Space will be the most impressive promotional and instructional tool yet for clubs and schools. It was fascinating watching the crew, aided by millions of dollars of video hardware, perform the special effects and the precision timing necessary to follow Neal and Pasternak's instructions.

The scenes from space are breathtaking. This work is being done in D.C. at Professional Video Services, an editing facility owned by *Larry D'Anna*, *WA3KOK*. Financial support for the project came from ICOM America in addition to ARRL/AMSAT. The associate producer is Mark Neal.

The producers told us about the history of Amateur Radio video productions, and how - and why - to obtain the latest tape.

"The first of the modern-day professional Amateur Radio films was 'Moving Up to Amateur Radio,' made in 1974. The ARRL still gets requests for it! The beauty of this production is that once made it lives forever. In 1979, Dave Bell/W6AQ produced the 'World of Amateur Radio'. The intent of that production was to pack as much information about the service as possible.

"In the early 1980s, General James Abramson, head of the Space Shuttle program, expressed interest in having Amateur Radio operation from space after discussions with K6DUE. With the support of amateurs in NASA, that effort developed into the famous 1983 Columbia flight of *Owen Garriott/W5LFL*.

"Videotaped material depicting amateurs in contact with W5LFL came in from all over the world and more than 100 TV stations. W6AQ even got video of Jordan's *King Hussein/JY1* talking with Owen. That material made it into the video titled 'Amateur Radio's Newest Frontier.'

"Tony England/W@ORE operated SSTV from space in 1985, and communicated via voice and SSTV with his wife and families of other astronauts. That story was told in the video 'SAREX.' That's where NASA came to see that Mission Control is their 'business line' from space, but Amateur Radio is their personal line.

"In 1987 ARRL expressed a need for an update of

the 'World of Amateur Radio.' So we produced the 'New World of Amateur Radio,' with a special effort to include kids. It is the most comprehensive and definitive video statement on Amateur Radio. We shipped home video cameras to hams all around the world. They provided us with beautiful footage of exotic DX sites for the video.

"K6DUE chaired the SAREX working group at ARRL with *Bill Tynan/W3XO* and others. Our goal was to get SAREX reinstated on Shuttle missions after the Challenger accident. Tony England and Owen Garriott had left the Shuttle program. But we had payload specialist *Ron Parise/WA4SIR*, who operated packet from mission STS-35, and *Ken Cameron/KB5AWP* who received fast-scan ATV uplinks on STS-37.

"With the emphasis on SSTV and FSTV in some of the missions, it is not just for ATV enthusiasts. We are reaching kids and schools with video. NASA has 800 schools that they work with closely. In NASA's educational program we found a home for Amateur Radio. The service needs new blood - we need to shake up the Amateur Radio community to get them to understand this fact. The way to do this in a positive way is to excite young people, to get them interested in being the radio experimenters of the future.

"Which brings us to our latest production, Ham Radio in Space! For the first time, this video is designed as a teaching tool. It is in five segments:

1. You Can Fly; 2. Ham Stations On Earth and In Orbit; 3. Hams Go to School; 4. Ham Radio in the 21st Century and; 5. How Ham Radio Got Into Space

"Each segment is separate, about five to eight minutes each in length. A teacher can play the segments one at a time, or play the entire package as a show. The theme is 'how kids can share the adventure of space with the astronauts.' Scenes show life and activity in space and amateur station operation onboard the Shuttle; Mission Control in Houston, Kennedy Space Center in Florida, Space Camp, Moonbase America, WA3NAN, the Goddard Space Flight Center amateur station, and even British and Soviet astronauts who are hams.

"We hope the tape will be duplicated so it can be used on a continuous basis by local Amateur Radio clubs and teachers. It's designed for use in the U.S. school system. It may be freely duplicated and copies will be available for loan or purchase. A broadcast over commercial satellite facilities is planned so that those with satellite receivers can pick it up and record it. Literature describing the video is also likely. Release is planned for October 15, 1991.

Everyone interested in obtaining copies of Ham Radio in Space or the other videos should contact **Rosalie White/WA1STO** at ARRL headquarters."

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Tom Blackwell/N5GAR, is one of the two petitioners seeking to have the FCC declare third party traffic originators primarily responsible for message content ...with automatic retransmitting stations being held secondarily accountable. Blackwell distributed a press release on August 6th stating:

"I have received a letter from Congressman John Bryant (D-Texas) [saying] that the FCC anticipates making a decision on our RM-7649 'by late September.' He is a member of the Subcommittee on Telecommunications and Finance of the House Energy and Commerce Committee.

"We hope the FCC will adopt the proposed Section §97.205(g), or similar wording, in a Notice of Proposed Rulemaking. If the Commission should deny the petition, we expect to file a Petition for Reconsideration.

"We appreciate the many kind letters of endorsement from amateurs around the country. With this we have been able to demonstrate a broad base of support.

"ARRL, General Counsel Chris Imlay, N3AKD, of the law office of Booth, Freret and Imlay, has written me to say: 'I was impressed with your rule-making petition, RM-7649. It is refreshing to read an FCC pleading that 'cuts to the chase.'"

Do you know what a Blue Racer, Lightning Bug, Zephyr, Mac-Key, Stream-speed, Melihan Valiant or a Codetrol is? They are some of the designations of various Morse code keys of yesteryear.

Kevs. Kevs. Kevs - written by Dave Ingram, K4TWJ - is the first book ever been written on the subject of the manual code key. Ingram's new book is a tribute to how it used to be done "...in the old days!"

Loaded with pictures and full descriptive text, this book shows just about every manual key that

was ever used in both Amateur and professional telegraphy circuits. (\$9.95 plus \$4.00 shipping from CQ Bookstore, Main St., Greenville, NH 03048.)

- Is Cheickna S. Baber, N4ZXA, the youngest Extra Class amateur in the U.S.? The Greensboro, North Carolina [Advanced Class] vouth passed the 20 words-perminute Morse code test on June 20, 1991 and the Amateur Extra written Element 4B examination on July 25th. He just turned ten years old on March 1st.
- And while we are on the subject of code: Yes, "Codeless Technicians" may indeed operate CW on-the-air even though they have not passed a Morse code examination. Techs have all Amateur privileges at 30 MHz and above.
- The new Handi-Ham manager at Courage Handi-Ham Systems is Patrick Tice, WAØTDA of Spring Grove, Minnesota. Tice has been a ham for some 24 years. He replaces Bruce Humphries, KØHR who is now the Executive Director at the Minnesota Institute of Archeology. Humphries headed up Handi-Hams, an organization dedicated to assisting disabled applicants become Amateurs, for more than 18 years.
- Tom Ingram, K400V, resigned as moderator of the National Conference of Volunteer Examiner Coordinators on July 29 citing family and personal considerations. Ingram was admitted to a private sanitorium in Birmingham on August 7, 1991 due to a nervous system collapse. His hospital stay will be a minimum of 28 days. Don Tunstill, WB4HOK, president of CAVEC (Central Alabama VEC, Inc.) has assumed Tom's VEC duties effectively immediately.

Two world 2-way long distance microwave communication records were recently set by Paul Lieb, KH6HME and Chip Angle, N6CA, Sunday, July 29, 1991. KH6HME is located at the 8200 foot level of Mauna Loa volcano on the Island of Hawaii. N6CA transmitted from the city hall parking lot at Rancho Palo Verdes, CA. The

claimed distance is 2,469 miles.

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The first record was on 3456 MHz, CW at 1:25 p.m. Hawaii time and second on 5760 MHz CW at 2:36 p.m. Paul was using 3 watts to a 4-foot dish antenna. Chip was also running 3 watts to a 3 or 4 foot dish. KH6HME maintains beacons at VHF and UHF on Mauna Loa. (Thanks KH6B)

ARRL Directors have adopted the new 6 meter band plan suggested by the League's VHF Repeater Advisory Committee (VRAC)

Segment:	Use:
50.100-50.300	SSB, CW
[50.100-50.125	DX Window]
[50.125	SSB Calling]
50.300-50.600	Non-Voice Communic.
[50.620	Digital/Packet Calling]
50.800-51.000	Radio remote control
	[20 kHz channels]
51.000-51.100	Pacific DX Window
51.120-51.480	Repeater inputs (19)
[51.120-51.180	
51.620-51.980	Repeater outputs (19)
[51.620-51.680	Digit. repeat. outputs]
52.000-52.480	Repeater inputs (23)
[52.020, 52.040) FM Simplex]
52.500-52.980	Repeater outputs (23)
[52.525, 52.540	
53.000-54.480	Repeater inputs (19)
[53.000, 53.020	
[53.1/53.2/53.3	/53.4 Radio Control]
53.500-53.980	Repeater outputs (19)
	/53.8 Radio Control]
[53.520	Simplex]
[53.900	Simplex]

AMSAT is reporting that an Austrian ham cosmonaut will operate AREMIR (Austrian Amateur Radio Experiment Aboard Mir) from the Soviet Space Station. Mission tentatively scheduled for Oct. 2-12.

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W5YI REPORT

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RADIO SHACK TO SELL 2 METER TRANSCEIVER Handheld to be available in Late October

With the introduction of their new catalog, Tandy/Radio Shack enters the 2-meter ham equipment marketplace. The 1992 catalog is scheduled for distribution next month ...with the radios being available at the end of October according to Tandy spokesman, *Ed Juge*, *W5TOO*. Juge is *Director of Market Planning* for the Tandy Corp. (700 One Tandy Center, Ft. Worth, TX 76102)

The new Realistic HTX-202 2-Meter Synthesized VHF-FM Handheld talkie is feature loaded and includes:

- Large capacity Ni-Cad Battery Pack/Charger
- Multifunction Scanning System
- 12 Independently Programmable Memory Channels
 ...plus One Calling and Three Priority Channels
- Subaudible Tone Encoder & Tone Squelch Built in
- Touch-tone (DTMF) Memory Dialer & DTMF Squelch
- Extra case for Six Alkaline Batteries, Belt Clip
- Rubber Ducky Antenna

An advance copy of the catalog (Page 68) indicates that the transceiver was "...built to commercial standards by Radio Shack's in-house hams" ...of which there are dozens! Tandy has their own ham club and 2-meter packet bulletin board. Tandy's *Vice President of Merchandising, Bob Miller/AA5FL* is an Extra Class ham. *Ed Juge/W5TOO* (also Extra Class) owned two ham equipment stores in both Dallas and Fort Worth before joining Radio Shack in the 1970's. The 2-m talkie retails for \$259.95 and will be carried in nearly all Radio Shack stores.

A large boxed-in message appearing within the catalog advertisement tells potential customers that the:

"No-Code License Makes it Easier Than Ever to Discover the Exciting World of Ham Radio!

Amateur radio is the ultimate in hobby communications - an activity enjoyed worldwide by several million and a community resource in times of emergency. Now that the FCC has created the no-code Technician-class license, you can get on the air without having to learn Morse code! A world of adventure awaits - contact other hams directly, through repeater stations or by 'packet' computer-to-computer communications. There are even ham satellites! The no-code Technician class license gives you full operating privileges on all ham bands above 30 MHz. License classes start in hundreds of communities nationwide every week -- visit your nearest Radio Shack store for details."

The instruction book that comes with the HTX-202 stresses the need for an Amateur license. Juge told us "If anyone sees an illegal sale, send me the details... date, time, store, employee, name and circumstances. If true, it won't happen again in THAT store."

FCC SAYS NO TO PELTS

The FCC has rejected the Personal Emergency Locator Transmitter Service (PELTS) from a permanent spectrum allocation. First conceived by cellular engineer *Ken Seymour/KA7OSM*, PELTS would allow persons injured or lost in the outdoors to signal for help.

The FCC turned the service down for two reasons. First, search-and-rescue teams were plainly unwilling to monitor the 220 MHz PELTS transmissions.

Second, the PELTS radio as proposed by the FCC was a costly, narrowband (5 kHz) two-way transceiver. Commenters told the Commission that it would not be financially reasonable to market such sophisticated radios.

The FCC has not yet released the full *Memoran-dum Opinion & Order* on PELTS, so the details must wait for a future issue.

COST OF SCREW-UPS IS UP

Like any other government agency, the FCC is looking for ways to increase revenues. A timehonored way is to make money with forfeitures. Under the *Communications Act*, the FCC has authority to impose "monetary forfeitures," that is fines for rules violations. Legislation has enabled the FCC to increase its fines, and the agency recently developed a new list of violations and dollar values associated with them.

On August 1, 1991, the FCC released a Policy Statement (FCC 91-217) that sets forth the FCC's standards for assessing fines under this statutory authority. The FCC said that its policy statement is intended to "...aid our enforcement efforts by making clear in advance the likely consequences of violations." There is now ample incentive for vigorous enforcement of FCC rules. Every FCC field office could become a profit center!

We have listed "base amounts" intended to "provide guidance to the public regarding the forfeitures that can be expected in connection with specific violations." The FCC is free to adjust the amount up or down depending on the nature, circumstances, extent and gravity of the violation and the degree of culpability, history of prior offenses and ability to pay. These amounts are anywhere from five to eighty percent of the statutory maximum which the FCC may impose depending on the situation.

The amounts listed are for a single violation or a single day of a continuing violation. For the Amateur Radio Service and services other than broadcasting, cable TV or common-carrier (such as telephone or cellular), the fines and violations are listed below. (Of course, not all fines apply to the Amateur Service but

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most do.) The fines for broadcasters, cable operators and common carriers are higher.

\$8,000 - Misrepresentation/lack of candor; Failure to comply with prescribed lighting and marking; Construction and/or operation without authorization; Unauthorized substantial transfer of control; Violations of distress/safety rules; False distress communications

\$7,500 - Failure to permit inspection; Violation of operator services requirements; Malicious interference; Failure to respond to Commission communications

\$7,000 - Importation or marketing of unauthorized equipment

\$6,000 - Exceeding authorized antenna height

\$5,000 - Exceeding power limits; Unauthorized emissions; Using unauthorized frequency; Transmission of indecent or obscene material

\$4,000 - Unauthorized discontinuance of service; Construction or operation at unauthorized location; Failure to engage in required frequency coordination

\$3,000 - Failure to file required forms or information

\$1,000 - Failure to give station ID; Failure to make required measurements or conduct required monitoring; Failure to maintain required records

\$500 - Miscellaneous violations

PAY-PER-CALL SERVICES - UNDER THE GUN!

The 1982 divestiture of A.T.&T's Bell operating companies set the stage for telephone companies to participate in audiotex services. Audiotex is automated or live operator information transmitted over the telephone lines. Today, just about any kind of information can be had by calling an 900 number. The telephone company simply bills an agreed upon amount for the service and (usually, but not always) shares the revenue with the Information Provider (IP). What started out as a sometimes questionable entertainment/sex talk service has now grown into a very innovative and sophisticated billion dollar business! Businessmen such as doctors, lawyerseven software support companies are turning to 900 service billing as a way of getting paid for the data they give out over the phone lines. Charities and fund raisers are getting the phone company to collect their contributions for them.

Sometimes there is no cost to the consumer ...such as when marketing companies ask shoppers to call a 900 number to receive various touch-tone prompted advertising messages, free sample products, 'price off' coupons ...or other premiums. Consumer paid 900 calls can be touch-tone switched to 800 (provider paid) service when a customer wants to place an order. The consumer's name and address is automatically captured using automatic number identification

(ANI) technology.

Direct marketers are just now beginning to effectively use telemedia; a name given to the use of multiple communications methods to generate leads or opinions, qualify customers, build databases and solicit orders. Telemedia service bureaus offer thousands of incoming lines; enough to support any "calling event."

ANI simply matches the incoming phone number against the national residential or business telephone database which is available to anyone. Thus, using ANI, sales firms are able to convert incoming calls into names for follow-up mailing and their telemarketing prospect lists.

ANI is the commercial version of Caller ID - only more complex. While Caller ID reveals and displays incoming phone numbers, ANI goes a step further and relates the phone number to the actual caller and their address. Some research firms are using ANI/900 technology to develop and market consumer profiles. Now that telephone companies are also being allowed to provide information, one wonders just how long it will be before they too will be selling information about you. Caller ID can be ordered blocked to preserve privacy, ANI at present can not.

Ads are targeting children who are being urged to call the "900" Easter bunny, Popeye, ...even Santa Claus. The parents get the billand phone shutoff if they don't pay. Many people calling 900 numbers are not aware just how expensive they can be. Consumer complaints charging fraud, deceptive practices and obscene programming are pouring into the regulators and Congress has responded by holding hearings. The Federal Trade Commission and the Federal Communications Commission are considering pay-per-call quidelines.

New federal and state regulations look toward requiring preamble 900 cost information ...with the option to hang up without charge, offering a one-time "forgiveness" to parents whose children run up unauthorized charges, price caps on 900-numbers, disclosures in advertising, consumer requested 900-call blocking, banning games of chance or awards ...and barring telephone companies from disconnecting service if 900-number bills aren't paid.

Thirteen states have either introduced or passed pay-per-call legislation and the 900-number lobby (represented by the *National Association for Information Services*) is not happy! They say only the FCC should have jurisdiction since the marketplace for 900 services is nationwide. NAIS believes the vast majority of 900 users are satisfied since only a couple of thousand complaints were registered with the FCC out of more than a billion completed 900 calls in 1990 alone.